Application No.: 10/088,894 Docket No.: 20459-00351-US

In the Specification

Please enter the following heading after the TITLE at page 1, line 5 of the Specification:

B1 --BACKGROUND OF THE INVENTION--

Please enter the following heading at page 2, between lines 25 and 26 of the Specification:

B2 --SUMMARY OF THE INVENTION--

Please enter the following heading at page 5, between lines 35 and 36 of the Specification:

B3 --BRIEF DESCRIPTION OF THE DRAWINGS--

Please enter the following heading at page 6, between lines 16 and 17 of the Specification:

B4 --DESCRIPTION OF PREFERRED EMBODIMENTS--

Please replace the Specification paragraph from page 6, line 17, through page 8, line 7 with the following replacement paragraph:

B5 --Fig. 1 shows diagrammatically the basic principles of the invention in its simplest variant as far as ramming shells is concerned. In the figure, the shell has the reference number 1, while 2 indicates the electric drive motor and 3 the drive wheel of the motor. A feed chain 4 runs around the drive wheel 3 and also around a chain wheel 5 which is driven by the chain but is considerably larger than the wheel 3 and will therefore rotate at a considerably lower speed. By using the feed chain 4, the rotating movement of the electric motor 2, and then chiefly its starting acceleration which is the motor movement of which use is mainly made in application of the invention, is therefore converted into a linear movement which is transmitted to the shell 1 via a shell rammer 6. The acceleration imparted to the shell therefore originates from the starting acceleration of the electric motor. However, the great weight of the shell 1 makes it necessary to provide additional energy as otherwise the motor would have to be exceptionally large, and,

according to the invention, this extra energy supply is provided by energy accumulated in an energy accumulator 7 at an earlier stage being released at the same time as the electric motor 2 is started. In its simplest form, the energy accumulator 7 consists of a coil or pneumatic spring which is compressed in its charged state. To trigger the energy accumulator, a locking system 8 is included, as indicated in the figure, which is operationally linked to the starting of the electric motor and which is disconnected at the same time as the electric motor 2 is supplied with starting current. The locking system 8 can advantageously, before starting, be replaced by the motor 2 being loaded in the braking direction, that is to say the direction in which it locks or counteracts the energy accumulator, after which the current direction is switched and increased to its maximum value at the same time as the energy accumulator 7 is triggered. This starting method results in an even more rapid start and therefore greater shell acceleration. To transmit the energy supply from the energy accumulator 7 to the feed chain 4 and thus to the rammer 6 and finally to the shell 1, there is also a second feed chain 9 which runs around on the one hand a guide wheel 10 and on the other hand a drive wheel 11, the latter being mounted firmly on the same spindle as the chain wheel 5 and therefore in turn driving it. When the electric motor 2 is started, the energy supply from the motor is imparted to the feed chain 4, and at the same time the energy accumulator 7 therefore delivers its energy supply, also to the feed chain 4, via the second feed chain 9, the combined energy supply from these two energy sources accelerating the shell 1 in the direction of the arrow A to a velocity which is sufficiently high for the shell to proceed to ramming in the ramming position of the piece (not shown). As soon as the shell has achieved the necessary velocity, the rammer 6 is braked to a stop, which takes place at the latest in line with the spindle of the drive wheel 3. The fact that the electric motor has an important role to play in the system can also be used in order to brake the ramming velocity of the shell if the energy supply from the energy accumulator should be too great in any position. Electronically controlling an electric motor using, for example, a velocity sensor as a point of reference is after all a simple routine procedure today. The simplest way of recharging the energy accumulator is, moreover, to reverse the electric motor until it has returned to the original position.--

AS amd.